IN THE CLAIMS

Please cancel claims 1 and 8 without prejudice or disclaimer, and amend claims 2, 9, 10, 11, and 12, as follows:

- 1. (Cancelled)
- 2. (Currently amended) An electrophoresis chip comprising:

an electrical insulating substrate having a linear hydrophilic region and a hydrophobic region adjacent to said hydrophilic region on a surface of said substrate;

an electrophoresis medium, formed on said hydrophilic region of said substrate by providing and having a gap of a predetermined length in one place in a longitudinal direction; and

a pair of electrodes connected to both ends of said electrophoresis medium in said longitudinal direction.

- 3. (Original) The electrophoresis chip according to claim 2, wherein said substrate is glass.
- 4. (Original) The electrophoresis chip according to claim 2, wherein said electrophoresis medium is a gel.
- 5. (Original) The electrophoresis chip according to claim 2, wherein a sample is held in said gap.
- 6. (Original) The electrophoresis chip according to claim 2, wherein said gap is provided in a position close to one end from a center of said electrophoresis medium in said longitudinal direction.

- 7. (Original) The electrophoresis chip according to claim 6, wherein a length of a longer element medium of two element media of said electrophoresis medium divided into two parts by said gap is set in a range of 10 mm to 100 mm.
- 8. (Cancelled)
- 9. (Currently amended) The electrophoresis chip according to claim 1, wherein An electrophoresis chip, comprising:

an electrical insulating substrate; and

an electrophoresis medium, formed to be linear on a surface of said substrate and having a gap, wherein a region adjacent to said electrophoresis medium on said surface of said substrate is hydrophobic; and

a length of said gap in [[said]] longitudinal direction of said electrophoresis medium is set in a range of 0.2 mm to 1 mm.

10. (Currently amended) An electrophoresis chip comprising:

an electrical insulating substrate having a plurality of linear hydrophilic regions formed almost in substantially parallel on a surface and a hydrophobic region adjacent to said hydrophilic regions;

a plurality of electrophoresis media, each formed on one of said plurality of hydrophilic regions of said substrate by providing and having a gap of a predetermined length in one place in a longitudinal direction; and

a pair of electrodes, one being connected to one [[ends]] <u>end of each</u> said plurality of electrophoresis media and the other being connected to the other [[ends]] <u>end of each</u> thereof.

11. (Currently amended) An electrophoresis chip comprising:

an electrical insulating substrate having a plurality of linear hydrophilic regions formed almost in substantially parallel on a surface of said substrate and a hydrophobic region adjacent to said hydrophilic regions;

a plurality of electrophoresis media, each formed on one of said hydrophilic regions of said substrate by providing and having a gap of a predetermined length in one place in a longitudinal direction; and

plural pairs of electrodes individually connected to both ends of <u>each of said</u> plurality of electrophoresis media.

12. (Currently amended) An electrophoresis chip comprising:

an electrical insulating substrate having a thin and long hydrophilic region formed on a surface of said substrate and a hydrophobic region formed surrounding said hydrophilic region; and

an electrophoresis medium, formed on said hydrophilic region of said substrate by providing and having a gap of a predetermined length in one place in a longitudinal direction,

wherein an electrophoresis lane is formed by said electrophoresis medium and sample solution supplied to said gap.

13. (Previously presented) The electrophoresis chip according to claim 2, wherein a width of said electrophoresis medium is set in a range of 0.1 mm to 5 mm.